

**Appl. No.** : **10/716,116**  
**Filed** : **November 18, 2003**

### **REMARKS**

Claims 8-19 are currently pending. Claims 1-7 are canceled. Claims 8 and 9 are amended herein.

#### **Drawings**

As suggested by the Examiner, Figures 1 and 2 have been amended to be designated by the legend –PRIOR ART--.

#### **Rejections Under 35 U.S.C. §112**

Claims 8-19 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner contends that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Applicants respectfully disagree that Claims 8-19 contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants point to the following portions of the specification, as originally filed, for support for the claim limitations noted by the Examiner, and respectfully submit that the §112 rejections of Claims 8-19 are moot:

Claim 8: For example, at page 8, line 13 – page 9, line 13 and at page 10, lines 8-13, the specification provides support for the limitation noted by the Examiner.

Claim 11: For example, at page 11, lines 2-5, the specification provides support for the limitation noted by the Examiner.

Claim 12: For example, at page 16, line 20- page 17, line 1 and at Fig. 5, the specification provides support for the limitation noted by the Examiner.

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Claims 9, 14-16: For example, at page 8, line 13 – page 9, line 13, at page 10, lines 8-13, at page 11, lines 5-9, at page 16, lines 1-5, the specification provides support for the limitations noted by the Examiner.

Claim 17: For example, at page 17, lines 7-16, the specification provides support for the limitation noted by the Examiner.

Claim 18: For example, at page 12, lines 10-12: the specification provides support for the limitation noted by the Examiner.

#### **Rejections Under 35 U.S.C. §102**

Claims 8-11, 14-16, 18, and 19 are rejected under 35 U.S.C. §102(b) as being anticipated by Miller et al., U.S. Patent No. 5,876,266. Claim 8 has been amended to recite at least a portion of the front surface of the pad comprising a second material prior to contact between the front surface of the pad and the first material. Claim 9 has been similarly amended to recite a pad positioned proximate to the workpiece having a first material configured to react with the material of the surface of the workpiece, wherein the first material is on at least a portion of a surface of the pad prior to contact between the surface of the pad and the surface of the workpiece. These amendments are fully supported by the specification as originally filed at, for example, page 11, lines 11-14.

Miller et al. do not disclose or suggest a pad having at least a portion of a surface comprising a material configured to react with a material *on at least a portion of a surface* of the pad prior to contact between the pad and the workpiece, as recited in independent Claims 8 and 9. Miller et al. disclose a polishing pad 63 having microcapsules containing reactive material *incorporated directly into* the polishing pad 63. As shown in Figs. 2 and 3 of Miller et al., the microcapsules are not on a surface of the pad 63 but “incorporated directly into” the pad 63. Miller et al., at Col. 8, line 59-63. During polishing, the Miller et al. pad 63 is eroded, thereby exposing the microcapsules, which then rupture and release their contents between the polishing pad 63 and the substrate surface. *See id.*, at Col. 8, line 64 – Col. 9, line 6. Miller et al. teach that “[c]ontrolled release of the micro-capsule contents is obtained by manipulation of polishing

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parameters,” such as the “force exerted between the wafer carrier and the polishing pad.” *Id.*, at Col. 9, lines 20-33. Miller et al. therefore disclose advantages of *embedding* microcapsules containing reactive material *within* the pad, which allows, for example, better control of polishing parameters, such as the polishing rate. Miller et al. therefore teach away from simply providing the reactive material on the *surface* of the pad prior to contact with the workpiece. Miller et al. therefore disclose *embedding* microcapsules that contain reactive material *within* the pad, not on the *surface* of the pad.

Independent Claims 8 and 9 are therefore patentable as they are not anticipated by Miller et al. Claims 10, 11, 14-16, 18, and 19, which depend from and include all of the limitations of amended Claim 9, are therefore also patentable over Miller et al. Furthermore, each of the dependent claims recites further distinguishing features of particular utility.

#### **Rejections Under 35 U.S.C. §103**

Claim 13 is rejected under 35 U.S.C. §103(a) as being unpatentable over Miller et al. as applied to claim 9, and further in view of Kaufman et al., U.S. Patent No. 5,954,997. As noted above, Miller et al. disclose embedding microcapsules that contain reactive material *within* the pad, and do not teach or suggest a material on at least a portion of the *surface* of the pad that is configured to react with a material on the surface of the workpiece, wherein the material is on at least a portion of the surface of the pad prior to contact between the pad and the workpiece, as recited in amended independent Claim 9. Similarly, there is no teaching or suggestion in Kaufman et al. of a pad having a material on at least a portion of the *surface* of the pad that is configured to react with a material on the surface of the workpiece. Amended Claim 9 is therefore patentable as it is not obvious in view of Miller et al. and Kaufman et al., either alone or in combination. Claim 13, which depends from and includes all of the limitations of amended Claim 9, is therefore also patentable over Miller et al. and Kaufman et al. Furthermore, Claim 13 recites further distinguishing features of particular utility.

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**Conclusion**

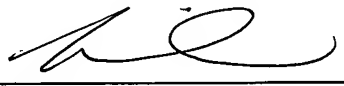
Applicants respectfully submit that all of the pending claims are patentably distinguishable and allowable over the prior art of record. The cited references, either alone or in combination, do not teach or suggest the claimed invention.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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### **AMENDMENTS TO THE DRAWINGS**

The two attached sheets of drawings includes changes to Figs. 1 and 2. The two sheets, one which includes Fig. 1 and another which includes Fig. 2, replace the original sheets including Figs. 1 and 2.

In Figs. 1 and 2, the legend –PRIOR ART-- has been added.

Attachments: Replacement Sheets